IN THE CLAIMS

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 3 and 5 are amended.

Claims 7-13 are new.

Listing of Claims:

1. (ORIGINAL) An optical recording medium for recording, reproducing, or erasing information by irradiation with a laser beam, comprising a disk-shaped transparent substrate and a recording layer formed on the substrate,

wherein information tracks and addresses are provided on the substrate, the information tracks including groove tracks and land tracks that are arranged alternatively in the form of a spiral or concentric circles, each of the addresses indicating a position on the recording medium and being composed of uneven strings of pits,

the strings of pits are arranged so that center lines of the strings of pits are shifted in a radial direction of the recording medium at a distance of about one-half of a track pitch from center lines of the groove tracks and center lines of the land tracks, and

a pit width W of the pits satisfies the relationship:

$Tp \times 0.37 \leq W \leq Tp \times 0.63$

with respect to a track pitch Tp of the recording medium.

2. (ORIGINAL) The optical recording medium according to claim 1,

wherein an optical head of an optical disk device being used has a laser wavelength of about 650 nm and a numerical aperture of an objective lens of about 0.6,

the recording medium has a track pitch of about 0.62 μm, and

the pits have a pit width W that falls within the range of 0.23 μm to 0.39 μm.

3. (CURRENTLY AMENDED) A substrate for an optical recording medium for recording, reproducing, or erasing information by irradiation with a laser beam,

wherein information tracks and addresses are provided on one face of the substrate, the information tracks including groove tracks and land tracks that are arranged alternatively in the form of a spiral or concentric circles, each of the addresses indicating a position on the recording medium and being composed of uneven strings of pits,[[,]]

the strings of pits are arranged so that center lines of the strings of pits are shifted in a radial direction of the recording medium at a distance of about one-half of a track pitch from center lines of the groove tracks and center lines of the land tracks, and

a pit width W of the pits satisfies the relationship:

$Tp \times 0.37 \leq W \leq Tp \times 0.63$

with respect to a track pitch Tp of the substrate.

4. (ORIGINAL) The substrate for the optical recording medium according to claim 3,

wherein an optical head of an optical disk device employing an optical recording medium manufactured using the substrate has a laser wavelength of about 650 nm and a numerical aperture of an objective lens of about 0.6,

the substrate has a track pitch of about 0.62 μm, and

the pits have a pit width W that falls within the range of 0.23 μm to 0.39 μm.

5. (CURRENTLY AMENDED) An optical disk device <u>for recording, reproducing or erasing information</u> ~~in which information is recorded, reproduced, or erased~~ by irradiating an optical recording medium with a laser beam, comprising[[,]]:

an optical head for focusing [[a]] <u>the</u> laser beam on the recording medium to obtain a reproduction signal using the laser beam reflected from the recording medium,

a photo detector provided in the optical head having light receiving parts divided into two parts in a direction parallel to tracks on the recording medium,

a summing amplifier for generating a sum signal of electric signals output from the two light receiving parts,

a differential amplifier for generating a difference signal of electric signals output from the two light receiving parts,

a first address demodulating circuit for demodulating address information using the sum signal, and

a second address demodulating circuit for demodulating address information using the difference signal.

6. (ORIGINAL) The optical disk device according to claim 5,

wherein the optical recording medium includes a disk-shaped transparent substrate and a recording layer formed on the substrate,

information tracks and addresses are provided on the substrate, the information tracks including groove tracks and land tracks that are arranged alternatively in the form of a spiral or concentric circles, each of the addresses indicating a position on the recording medium and being composed of uneven strings of pits,

the strings of pits are arranged so that center lines of the strings of the pits are shifted in a radial direction of the recording medium at a distance of about one-half of a track pitch from center lines of the groove tracks and center lines of the land tracks, and

a pit width W of the pits satisfies the relationship:

$Tp \times 0.37 \leq W \leq Tp \times 0.63$

with respect to a track pitch Tp of the recording medium.

7. (NEW) An optical disk device for recording, reproducing or erasing information by irradiating an optical recording medium with a laser beam, comprising:

an optical head for focusing a laser beam on the recording medium to obtain a reproduction signal using the laser beam reflected from the recording medium;

a photo detector provided in the optical head having light receiving parts divided into two parts in a direction parallel to tracks on the recording medium;

a summing amplifier for generating a sum signal of electric signals output from the two light receiving parts;

a differential amplifier for generating a difference signal of electric signals output from the two light receiving parts;

a first address demodulating circuit for demodulating address information based on the sum signal; and

a second address demodulating circuit for demodulating address information based on the difference signal;

wherein the address information demodulated by said second address demodulating circuit is the same as the address information demodulated by said first address demodulating circuit.

8. (NEW) An optical recording medium for recording, reproducing, or erasing information by irradiation with a laser beam, comprising:

a disk-shape substrate including a recording layer;

information tracks including groove tracks and land tracks that are arranged alternately in a form of a spiral or concentric circles on said substrate, a track pitch of the groove tracks being approximately equal to a track pitch of the land tracks;

strings of address pits on said substrate, center lines of said strings of the address pits being arranged so that the center lines of said strings of the address pits are radially shifted a distance of about one-half of the track pitch of the groove tracks or the land tracks from the center lines of the groove tracks and the land tracks; and

a sum signal of an electric signal from a reflected laser beam obtained by irradiating the laser beam on said optical recording medium while rotating said optical recording medium satisfies the following formula:

$$0 \leq (XI = (I1\beta - I1\alpha) / 2 \times I1max) \leq 0.05$$

$I1\beta$: a voltage difference between a value at a maximum amplitude of the sum signal waveform and a value at a minimum amplitude of the sum signal waveform;

$I1\alpha$: a voltage difference between a value at a minimum amplitude of the sum signal waveform and a value at a maximum amplitude of the sum signal waveform;

$I1max$: a maximum amplitude of the sum signal; and

X1: an asymmetry value.

9. (NEW) An optical recording medium for recording, reproducing, or erasing information by irradiation with a laser beam, comprising:

a disk-shape substrate including a recording layer;

information tracks including groove tracks and land tracks that are arranged alternately in a form of a spiral or concentric circles on said substrate, a track pitch of the groove tracks being approximately equal to a track pitch of the land tracks;

strings of address pits on said substrate, center lines of said strings of the address pits being arranged so that the center lines of said strings of the address pits are radially shifted a distance of about one-half of the track pitch of the groove tracks or the land tracks from center lines of the groove tracks and the land tracks; and

a difference signal of an electric signal from a reflected laser beam obtained by irradiating the laser beam on said optical recording medium while rotating said optical recording medium satisfies the following formula:

$$-0.05 \leq (X2 = (I2\beta - I2\alpha) / 2 \times I2max) \leq 0$$

$I2\alpha$: a voltage difference between a value at a maximum amplitude of the difference signal waveform and a value at a minimum amplitude of the difference signal waveform;

$I2\beta$: a voltage difference between a value at a minimum amplitude of the difference signal waveform and a value at a maximum amplitude of the difference signal waveform;

I2max : a maximum amplitude of the difference signal; and

X2: an asymmetry value.

10. (NEW) The optical disk device according to claim 5,

wherein the first address demodulating circuit and the second address demodulating circuit are simultaneously operable.

11. (NEW) The optical disk device according to claim 5, further comprising:

a controller for receiving and transmitting the information to be recorded or reproduced,

wherein inputs to the controller include outputs from the first and second address demodulating circuits.

12. (NEW) The optical recording medium according to claim 8,

wherein an optical head of an optical disk device being used has a laser wavelength of about 650nm and a numerical aperture of an objective lens of about 0.6.

13. (NEW) The optical recording medium according to claim 9,

wherein an optical head of an optical disk device being used has a laser wavelength of about 650nm and a numerical aperture of an objective lens of about 0.6.